

1. A weight lifting system configured to enable convenient coupling of weights to a handle, the weight lifting system comprising:

a handle having first and second opposing ends, the opposing ends having a hollow interior;

a plurality of weight plates, each weight plate having an aperture therethrough;  
and

first and second locking mechanisms configured to selectively couple the weight plates to the respective opposing ends of the handle, at least one of the first and second locking mechanisms comprising a moveable cam.

2. A weight lifting system as recited in claim 1, wherein the cam is configured to be selectively engaged with an interior surface of the handle.

3. A weight lifting system as recited in claim 1, wherein the cam has threads configured to threadedly engage an interior surface of the handle.

4. A weight lifting system as recited in claim 1, wherein each locking mechanism comprises (i) a sleeve, the cam being rotatably coupled to the sleeve, and (ii) a push rod that slides within the sleeve and selectively contacts different portions of the cam so as to selectively the position of the cam.

5. A weight lifting system as recited in claim 1, wherein the cam has a slanted body.

6. A weight lifting system as recited in claim 1, wherein the cam selectively moves between a locked position and an unlocked position within an interior surface of the handle.

7. A weight lifting system as recited in claim 1, wherein the cam is selectively actuated through the use of a push rod.

8. A weight lifting system as recited in claim 1, wherein the cam is selectively in threaded engagement with an interior surface of the handle.

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9. A weight lifting system configured for selective coupling of weight plates to a handle and for convenient disengagement of the weight plates from the handle, the weight lifting system comprising:

a handle having hollow interior surfaces on opposing ends thereof;

a plurality of weight plates, each weight plate having an aperture therethrough;

and

first and second opposing locking mechanisms each having a portion configured to extend through the weight plates and into the interior surface of the handle, each locking mechanism comprising a cam configured to selectively engage the interior surface of a respective end of the handle.

10. A weight lifting system as recited in claim 9, wherein the weight plates are configured to nest within each other.

11. A weight lifting system as recited in claim 9, wherein the weight plates have a frusto-conical shape.

12. A weight lifting system as recited in claim 9, wherein the portion of each locking mechanism configured to extend through the weight plates and into the interior surface of the handle comprises an elongate portion.

13. A weight lifting system as recited in claim 9, wherein the cam is selectively locked or unlocked with respect to the handle.

14. A weight lifting system comprising:
- a handle;
- a plurality of weights; and
- first and second locking mechanisms that couple a respective weight to the handle, at least one of the locking mechanisms including a moveable threaded member that selectively engages an interior surface of the handle.
15. A system are recited in claim 14, wherein the moveable member comprises a cam.
16. A system as recited in claim 14, wherein twisting the cam in one direction tightens the threads of the cam against internal threads of the handle and wherein twisting the cam in an opposing direction threads the locking mechanism out of the handle.

17. A weight lifting system comprising:
- a handle;
- a plurality of weights; and
- first and second locking mechanisms that couple a respective weight to opposing ends of the handle, the locking mechanisms each including a rotating member that selectively engages an interior surface of the handle.
18. A weight lifting system as recited in claim 17, wherein the rotating member comprises a cam.
19. A weight lifting system as recited in claim 18, wherein the cam has threads thereon.
20. A weight lifting system as recited in claim 19, wherein the threads selectively engage an interior surface of the handle.

21. A weight lifting system comprising:
- a handle;
  - a plurality of weights; and
  - first and second locking mechanisms that couple a respective weight to the handle, at least one of the locking mechanisms comprising a cam assembly that selectively engages an interior surface of the handle.
22. A weight lifting system as recited in claim 21, wherein each cam assembly comprises (i) a member that rotates between an engaged position and a non-engaged position; and (ii) a rod configured to selectively move the member.
23. A weight lifting system as recited in claim 21, wherein each cam assembly comprises a rotatable cam and a push rod that selectively moves the cam.

24. A weight lifting system comprising:

a handle having a grip configured to be grasped by a user;

a plurality of weights, each of the weights having an aperture therethrough; and

first and second locking mechanisms that couple a respective weight to an opposing end of the handle, each of the locking mechanisms including a cam assembly, the cam assembly comprising (i) a threaded moveable member that selectively engages an interior surface of the handle; and (ii) a push rod configured to selectively contact different portions of the moveable member, such that movement of the push rod selectively positions the moveable member into a locked position or an unlocked position.